

## Math Performance Event

Grades 3-5

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## J & J Candy Company

**Purpose:** This performance event may be used as a culminating activity for a unit about graphs and tables. The students will survey the contents of two bags of candy, create a table or graph, and interpert the results to draw a conclusion. The students are expected to write a letter of explanation stating the conclusion and give the supporting evidence to back-up the claim .

#### **Show-Me Standards Addressed:**

Knowledge: M6

Performance: 1.8, 4.1, 3.5, 2.1

**Grade Level Range**: 3-5

Subject Area: Math

Materials Needed: pencil, Student Performance Event Packet containing: Student Prompt, Candy Contents Sheet, Student Response Sheet, Letter Form, and the Student Scoring Guide.

Time Needed for Task/Event: 35-40 minutes

**Instructions for Administration:** Present students with the Student Performance Packet and read the prompt so students clearly understand what to do. Take time to go over the scoring guide so students know what a quality response includes.

**Pre-assessment Instructions:** Talk about the different types of graphs and tables and the purposes of each.

## J & J Candy Company

You are the product control coordinator for the J & J Candy Company. Every bag of J & J Candy should contain the same number of each of the five colors of candy (10 red, 10 green, 10 yellow, 10 orange, 10 blue = 50 total pieces in each bag).

It has been rumored that your company has been infiltrated by saboteurs. Your job is to examine the contents of two bags of J & J Candy to make sure that equal amounts of each of the five colors of candy are contained within the bags and that all 50 pieces are still there.

After examining the contents, create a graph or table that shows what a bag of J & J Candy should look like as compared to the contents of the two bags examined by you.

Then, write a letter to the Board of Directors to let them know if the company has been infiltrated or not. Be sure to explain how you arrived at this conclusion.











# **Candy Contents**

Bags to be examined.

Pieces of Candy

 $\overline{R=Red}$ 

B= Blue

G= Green

O= Orange

Y= Yellow





Bag Number

Bag

1

Number

### **Student Response Sheet**

Create a table or graph that shows what the contents of a bag of J & J Candy should look like as compared to the contents of the two bags you examined. Be sure to show the numbers of each of the five colors of candy and total amounts contained within each bag.

Write a letter to the Board of Directors to let them know if the company has been infiltrated. Be sure to give the evidence to back-up the claim.

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### Teacher's Scoring Guide

4

The chart or table clearly and accurately shows a comparison between the contents of a normal bag of candy and the two bags examined. Both, the color amounts and the bags' total contents, have been used as points of comparison.

The data for the most part has been accurately recorded and may have minor flaws with no effect on the chart's ability to convey meaning or be clearly understood.

The results of the examination of the two bags of candy have been interpreted accurately to draw the conclusion that the company has been infiltrated.

The letter written to the Board of Directors clearly communicates whether or not the company has been infiltrated and gives an abundance of accurate, detailed information to support the claim.

3

The chart or table shows a comparison between the contents of a normal bag of candy and the two bags examined. Both, the color amounts and the bags' total contents, have been used as points of comparison.

The data for the most part has been accurately recorded and may have minor flaws with minimal effect on the chart's ability to convey meaning or be understood.

The results of the examination of the two bags of candy have been interpreted accurately to draw the conclusion that the company has been infiltrated.

The letter written to the Board of Directors communicates whether or not the company has been infiltrated and gives accurate information to support the claim.

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The chart or table attempts to show a comparison between the contents of a normal bag of candy and the two bags examined. Either the color amounts or the bags' total contents, may have been used as a point for comparison.

The data recorded may have flaws or extraneous information that indicates lack of understanding or confusion. The table or graph may be difficult to understand.

The results of the examination of the two bags of candy **may** have been interpreted accurately to draw the conclusion that the company has been infiltrated.

The letter written to the Board of Directors attempts to communicate whether or not the company has been infiltrated but gives little, if any, evidence to support the claim. The letter is difficult to understand.

1

The chart or table does not show a comparison between the contents of a normal bag of candy and the two bags examined.

The data recorded has severe flaws or extraneous information that indicates lack of understanding or confusion. The table or graph may not able to be understandable.

If an accurate conclusion was drawn, that the company has been infiltrated, it was probably due to a guess rather than critical examination of the contents.

The letter written to the Board of Directors does not communicate if the company has been infiltrated or it is incomprehensible.

## Student Scoring Guide

I created an accurate table or graph that clearly shows the comparison between a normal bag of J & J Candy as compared to the two examined. (M6, 1.8)







I interpreted the results of the examination accurately to determine if the company has been infiltrated. (3.5)







I wrote a letter to the Board of Directors that clearly communicated whether or not the company had been infiltrated and gave accurate information to support the conclusion. (4.1, 2.1)





